

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the present application are respectfully requested in view of the following remarks.

I STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 26-56 are currently pending in this application.

II REJECTIONS UNDER 35 U.S.C. §§ 102(b) & 103(a)

Claims 26-56 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,888,915 to Denton et al. (hereinafter merely “Denton”).

Claim 26 recites:

“A textile structure made in a manner comprising the steps of:
spiral winding machine direction (MD) yarns to form a system having a defined width; and
depositing a pattern of cross machine direction (CD) elements onto said system of MD yarns.” (emphasis added)

Denton relates to paper machine clothing comprised of bicomponent fibers in both the machine and cross machine direction. In Denton, a fused, bonded structure of bicomponent fibers is formed, where the sheath component has a melting point lower than the core component. The fabric constructed of bicomponent fibers is heated to a temperature greater than the melting point of the sheath component and lower than the melting point of the core component, and subsequently cooled to below melt temperature of the sheath component, forming a fused, bonded structure.

Denton, clearly, teaches the use of intersecting, interconnected fibers or yarns in both CD and MD directions of its fabric. It, however, does not teach or disclose depositing a pattern of cross machine direction (CD) elements onto a system of MD yarns, as recited in claim 26.

Denton's construction is basically a woven construction, due to which there are bond points between the MD and CD yarns when the fabric is heated to a temperature greater than the melting point of the sheath component and lower than the melting point of the core component.

A woven structure, as known to any person of ordinary skill in the art, is not formed by depositing a pattern of cross machine direction (CD) elements onto a system of MD yarns.

Rather, the layers of MD and CD yarns are interwoven to form the fabric structure. The instant invention, on the other hand, is directed to a textile structure made by spiral winding MD yarns to form a system having a defined width; and depositing a pattern of CD elements onto the MD yarns. The CD elements are created on the MD yarn system by depositing a polymer resin orthogonally on one or both surfaces of the MD yarn system to obtain a system of CD elements interlocking with the MD yarns. The instant invention does not teach the use of yarns or fibers like Denton. Therefore Applicant submits that instant claim 26 is neither obvious nor anticipated by Denton, and is therefore patentable.

Further in the Office Action, claims 26-35, 39-42, and 44-56 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,360,656 to Rexfelt et al. (hereinafter merely "Rexfelt").

Rexfelt relates to a press fabric comprising a base fabric which is made of fabric of yarn material and is endless in the machine direction, and one or more layers of fiber material is arranged on the base fabric. The base fabric comprises layers composed of a spirally-wound strip of fabric material and having a width which is smaller than the width of the final base fabric. According to Rexfelt, longitudinal threads of the spirally-wound fabric strip of yarn material make an angle with the machine direction of the fabric. The fabric strips of Rexfelt are flat woven using longitudinal and crosswise threads in machine and cross machine directions.

As to Rexfelt, the Examiner refers to layering of the fabrics one over the other such that the longitudinal threads in one layer make an angle both with the MD of the press felt and with the longitudinal threads in another layer. However, the Examiner does not address the deposition of "CD elements" in Rexfelt's fabric. Layering of fabrics (woven) does not imply or is neither equivalent to a) spiral winding of yarns or b) deposition of CD elements onto MD yarn system. Therefore Applicant respectfully submits that independent claim 26 is unobvious over Rexfelt, and is therefore patentable.

Claims 26-56 were also rejected under 35 U.S.C. §102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as being obvious over now U.S. Patent 6,491,794 to Davenport (hereinafter merely "Davenport").

Davenport relates to an on-machine-seamable papermaker's fabric having a base structure which is a flattened array of a spirally wound multicomponent yarn. In each turn of the spiral winding, the multicomponent yarn has a substantially lengthwise orientation and is joined side-by-side to those adjacent thereto by a fusible thermoplastic material in each of the two layers. The multicomponent yarn of Davenport forms seaming loops along the two widthwise edges and multiple layers of staple fiber material are needled into one of the two sides of the base structure.

As to Davenport, the Examiner admits in the Office Action that Davenport does not teach the use of either CD yarns. The CD interdigitated loops that the Examiner is referring to on page 4 of the Office Action are seaming loops that are inserted in the fabric for seaming purpose. However, these seaming loops do not contribute to the structural integrity of the fabric and therefore cannot serve as the "CD elements" recited in instant claim 26. Moreover, Davenport, clearly, does not teach the deposition of CD elements onto the MD yarn system. In the instant invention, CD elements are created on the MD yarn system by depositing a polymer resin

orthogonally thereto on one or both surfaces thereof so as to obtain a system of CD elements interlocking with the MD yarns and the CD elements are subsequently cured to obtain a solid system of CD elements, or if a molten polymer is used, it is subsequently cooled to obtain a solid system of CD elements. According to Davenport, there are no cross-machine-direction (CD) yarns in that fabric, and the base structure has CD stability because of the bonding of the machine-direction (MD) yarns side-by-side to one another. Therefore Applicant submits that instant claim 26 is neither obvious nor anticipated by Davenport, and is therefore patentable.

In view of the foregoing remarks, Applicant submits that claim 26 is patentable over the prior art cited in the Office Action and request the withdrawal of the rejections.

III. DEPENDENT CLAIMS

The other claims are dependent from claim 26, discussed above, and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.


CONCLUSION

In view of the foregoing remarks, favorable reconsideration of the application, withdrawal of the rejections, and prompt issuance of the Notice of Allowance are earnestly solicited.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP

A handwritten signature in black ink, appearing to read 'Ronald R. Santucci', is written over a horizontal line.

Ronald R. Santucci

Reg. No. 28,988

Tel. No. (212) 588-0800